

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-38. (Canceled)

39. (Previously Presented) A potentiometer comprising:

a wiper;

a resistor plate having a resistor path thereon; and

a button coupled to the wiper for sliding movement along the resistor path in a first direction and a second direction opposite the first direction, the button including a first end configured to lead the button when moving in the first direction, and a second end configured to lead the button when moving in the second direction, at least one of the first and second ends being generally wedge-shaped to facilitate moving debris out of a path of the button as the button moves along the resistor path.

40. (Previously Presented) The potentiometer of claim 39, wherein the button defines a longitudinal axis and is elongated in a direction substantially parallel to the longitudinal axis.

41. (Previously Presented) The potentiometer of claim 40, wherein the button has a length dimension defined along the longitudinal axis, the length dimension being at least about 3.0 mm.

42. (Previously Presented) The potentiometer of claim 40, wherein the button has a width dimension defined transverse to the longitudinal axis, the width dimension being no more than about 1.8 mm.

43. (Previously Presented) The potentiometer of claim 40, wherein the first end of the button is defined by

- a first sidewall portion oblique to the longitudinal axis;
- a second sidewall portion oblique to the longitudinal axis; and
- an apex portion interconnecting the first and second sidewall portions.

44. (Previously Presented) The potentiometer of claim 43, wherein the apex portion of the button has a radius of no more than about 0.40 mm.

45. (Previously Presented) The potentiometer of claim 43, wherein each of the first and second sidewall portions of the button define an angle θ with the longitudinal axis, θ being at least about 11° , but no more than about 23° .

46. (Previously Presented) The potentiometer of claim 43, wherein the first end of the button is further defined by

a surface substantially transverse to the first sidewall portion, the second sidewall portion, and the apex portion;

a first side edge portion interconnecting the surface and the first sidewall portion; and

a second side edge portion interconnecting the surface and the second sidewall portion.

47. (Previously Presented) The potentiometer of claim 46, wherein at least one of the first and second side edge portions of the button have a radius of no more than about 0.20 mm.

48. (Previously Presented) The potentiometer of claim 46, further comprising a leading edge portion interconnecting the apex portion and the surface, the leading edge portion having a radius of no more than about 0.20 mm.

49. (Previously Presented) The potentiometer of claim 46, wherein the surface of the button has a radius of at least about 15 mm in a direction extending along the longitudinal axis.

50. (Previously Presented) The potentiometer of claim 39, wherein both the first and second ends of the button are generally wedge-shaped.

51. (Previously Presented) A potentiometer comprising:

- a wiper;
- a resistor plate having a resistor path thereon;
- a plurality of resistor traces coupled to the resistor plate and positioned along the resistor path in spaced increments; and
- a button coupled to the wiper for sliding movement along the resistor path in a first direction and a second direction opposite the first direction, the button including an arcuate surface configured to slide along the resistor path and span the increment between two adjacent resistor traces such that a jouncing motion of the button is substantially prevented as the button moves along the resistor path.

52. (Previously Presented) The potentiometer of claim 51, wherein the button defines a longitudinal axis and is elongated in a direction substantially parallel to the longitudinal axis.

53. (Previously Presented) The potentiometer of claim 52, wherein the button has a length dimension defined along the longitudinal axis, the length dimension being at least about 3.0 mm.

54. (Previously Presented) The potentiometer of claim 52, wherein the surface of the button is arcuate in a longitudinal direction and has a radius of at least about 15 mm.

55. (Previously Presented) The potentiometer of claim 51, wherein the increment between two adjacent resistor traces is about 0.2 mm.

56. (Previously Presented) A potentiometer comprising:

- a wiper;
- a resistor plate having a resistor path thereon; and
- a button coupled to the wiper for sliding movement along the resistor path, the button including
 - an arcuate surface, wherein at least a portion of the surface is in sliding contact with the resistor path; and
 - an edge portion tangent with the arcuate surface, the edge portion and the resistor path defining an edge gap therebetween of no more than about 0.10 mm.

57. (Previously Presented) The potentiometer of claim 56, wherein the button defines a longitudinal axis and is elongated in a direction substantially parallel to the longitudinal axis.

58. (Previously Presented) The potentiometer of claim 57, wherein a first end of the button is defined by

- a first sidewall portion oblique to the longitudinal axis;
- a second sidewall portion oblique to the longitudinal axis; and
- an apex portion interconnecting the first and second sidewall portions.

59. (Previously Presented) The potentiometer of claim 58, wherein the edge portion is one of a leading edge portion interconnecting the apex portion and the arcuate surface, a first side edge portion interconnecting the arcuate surface and the first sidewall portion, and a second side edge portion interconnecting the arcuate surface and the second sidewall portion.

60. (Previously Presented) The potentiometer of claim 59, wherein at least one of the leading edge portion, the first side edge portion, and the second side edge portion has a radius of no more than about 0.20 mm.

61. (Previously Presented) The potentiometer of claim 56, wherein the edge portion is defined by an arc, and wherein the edge gap is measured from the resistor path to a midpoint of the arc in a direction normal to the resistor path.

62. (Canceled)

63. (Previously Presented) The potentiometer of claim 39, further comprising:
a float coupled to the wiper, the wiper being responsive to movement of the float.

64. (Previously Presented) The potentiometer of claim 63, wherein the potentiometer is configured to be positioned in a fuel tank and is operable to determine the amount of fuel in the fuel tank.

65. (Previously Presented) The potentiometer of claim 51, further comprising:
a float coupled to the wiper, the wiper being responsive to movement of the float.

66. (Previously Presented) The potentiometer of claim 65, wherein the potentiometer is configured to be positioned in a fuel tank and is operable to determine the amount of fuel in the fuel tank.

67. (Previously Presented) The potentiometer of claim 56, further comprising:
a float coupled to the wiper, the wiper being responsive to movement of the float.

68. (Previously Presented) The potentiometer of claim 67, wherein the potentiometer is configured to be positioned in a fuel tank and is operable to determine the amount of fuel in the fuel tank.

69. (Previously Presented) The potentiometer of claim 52, wherein the button includes a ratio of a radius of the arcuate surface in a longitudinal direction to a length dimension in the longitudinal direction of at least 2 to 1.

70. (Previously Presented) The potentiometer of claim 69, wherein the ratio of the radius of the arcuate surface in the longitudinal direction to the length dimension in the longitudinal direction is about 5 to 1.